

Appl. No. 09/720,623
RESPONSE
Docket No. MAEJ-136

REMARKS

Claims 3, 6, 8-9, and 12-21 are pending.

I. FORMAL MATTERS

Claims 19 and 21 were objected to under 37 CFR 1.75(c) as assertedly failing to limit the subject matter of a previous claim. This objection is respectfully traversed.

The Claim 19 and Claim 21 step of measuring further limits the processes recited in independent Claims 12 and 20, respectively. Actual measurement of the ether content is not necessary to practice the claimed invention as recited in Claims 12 and 20 every time the reaction is run. Once reaction parameters, such as reactant amounts, temperature, and time of reaction are determined to result in the desired ether content, the reaction parameters can be repeated to obtain the desired ether content without actually measuring it. For example, the process of Example 1 can be run using the Example 1 parameters without actually measuring the ether content. Claims 1 and 20 do not require a measuring step, but Claims 19 and 21 do require a measuring step and therefore properly further limit the claims upon which they depend. Thus, Claims 19 and 21 comply with the requirements of 37 CFR 1.75(c). Reconsideration and withdrawal of the objection are respectfully requested.

Claims 3, 6, 8-9, and 12-21 were rejected under 35 U.S.C. 112, first paragraph, as assertedly being non-enabling. This rejection is respectfully traversed.

The specification discloses that in order to adjust the ratio of ether product several factors may be adjusted appropriately, such as reaction temperature, retention time of reaction, catalyst concentration, or water content. These parameters can easily be set using the molar fraction of the amount of ether product relative to that of the mixture of products as an index. See specification at page 8, lines 2-10.

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The Examiner notes that the reaction temperature and moisture concentration in Comparative Example 1 is the same as in Example 1, and therefore asserts that the specification is only enabling for obtaining an ether product to total product molar ratio of 0.1 at a catalyst level of 0.255% by weight or lower (Office Action at page 2). Example 1 and Comparative Example 1 merely show that by altering the catalyst concentration at a set temperature, moisture content, and retention time, one of ordinary skill in the art would be able to achieve the claimed molar fraction of ether product relative to that of the mixture of products. However, one of ordinary skill in the art could also achieve the claimed molar fraction at different catalyst concentrations, such as those recited in independent Claim 12, by altering reaction temperature, retention time, or moisture content. These alterations in reaction conditions, such as reaction time, to achieve the claimed molar fraction are clearly a matter of routine experimentation for one of ordinary skill in the art and are not burdensome or unpredictable, as asserted by the Examiner. For example, in Comparative Example 1 where the amount of catalyst is 0.99wt.%, the reaction time could be adjusted to achieve the claimed molar fraction without undue experimentation. See page 8, lines 2-10.

Enablement requires that the specification teach those skilled in the art to make and use the full scope of the claimed invention without undue experimentation. PPG Industries Inc. v. Guardian Industries Corp., 37 USPQ2d 1618, 1623 (Fed. Cir. 1996). The Federal Circuit noted that:

The test is not merely quantitative, since a considerable amount of experimentation is permissible, if it is merely routine, or if the specification in question provides a reasonable amount of guidance with respect to the direction in which the experimentation should proceed to enable the determination of how to practice a desired embodiment of the invention claimed.

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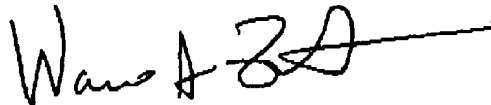
Id. at 1623. The instant specification provides direction and guidance on how to practice the claimed invention, including specific examples of the claimed processes. Because one of ordinary skill in the art would understand the scope of the claims when read in light of the specification; and can practice the claimed processes without undue experimentation, the requirements of 35 U.S.C. first paragraph, are satisfied. Reconsideration and withdrawal of the rejection are respectfully requested.

II. CONCLUSION

In light of the foregoing remarks, this application is in condition for allowance, and early passage of this case to issue is respectfully requested. If there are any questions regarding this Amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application.

If any fees are required or if there are any discrepancies in the fees please charge or credit our Deposit Account No. 501032 (Docket No. MAEJ-136).

Respectfully submitted,



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